The application has been objected to under 37 C.F.R. §3.73(b) as lacking evidence of right to take action on the part of the assignee. In response to this ground of objection, Applicant has submitted herewith a proper assent of the assignee in compliance with 37 C.F.R. §3.73(b). In addition, Applicant also refers to the typed additional paragraph at the end of the declaration. Accordingly, reconsideration and withdrawal of this ground of rejection are respectfully requested.

Claims 8-11 and 12 have been rejected under 35 U.S.C. §112, second paragraph on the grounds that they are incomplete in that they omit an essential step or an essential element. In particular, the allegedly omitted step is a comparison of the ratio between turbine revolution speed and engine revolution speed (Nt/Ne) and a threshold value, in Claim 12, and the omission of a corresponding element in Claim 8.

By the foregoing amendment, Applicant has amended Claims 8 and 12 to incorporate the element or step referred to by the Examiner. In particular, the changes to Claims 8 and 12 are indicated below, using conventional underlining and bracketing:

8. (Twice Amended) Torque estimation system for estimating an input torque to be used in controlling an automatic transmission, comprising:

a first output torque estimating unit for estimating a first input-torque of said automatic transmission using an engine torque characteristic;

a second input torque estimating unit for estimating a second input-torque of said automatic transmission using a torque-converter characteristic;

a deviation calculating unit for calculating a deviation of said first estimated input-torque and said second estimated input-torque; [and]

a unit for comparing a ratio Nt/Ne between a turbine revolution speed Nt and an engine revolution speed Ne with a threshold value; and

a correcting unit for correcting said first estimated input torque using said deviation when the ratio Nt/Ne is not smaller than the threshold value.

12. (Amended) A method of estimating an input torque for use in controlling an automatic transmission of a vehicle, the method comprising the acts of:

estimating a first input-torque of said automatic transmission using an engine torque characteristic;

estimating a second input-torque of said automatic transmission using a torque-converter characteristic;

calculating a deviation of said first estimated input-torque and said second estimated input-torque; [and]

<u>comparing a ratio Nt/Ne between a turbine revolution speed Nt and an engine revolution speed Ne with a threshold value; and</u>

correcting said first estimated input-torque using said deviation.

In addition, Claims 8 and 12 have been amended to recite that the correcting unit corrects the first estimated input torque using the deviation, when the ratio Nt/Ne is not smaller than the threshold value. This feature of the invention is supported by the disclosure at Column 7, lines 43-50 and especially lines 47-50. In this regard, Applicant notes that the correction of the first estimated input torque is carried out when the ratio Nt/Ne is not smaller than the threshold value, rather than when the ratio Nt/Ne is less than the threshold value as indicated in the Office Action. This is because the first input torque is corrected when the first input torque is used as the estimated torque; i.e., when the ratio Nt/Ne is not smaller than the threshold value.

It is also true that the deviation is calculated when the ratio Nt/Ne is less than the threshold value as noted by the Examiner. This is a common technique in the art. The additional limitation added to the last paragraph of both Claims 8 and 12, however, recites that the correcting unit corrects the first estimated input torque when the ratio Nt/Ne is not smaller than the threshold value as noted above. This additional feature enables the invention to resolve difficulties in the operation of the automatic transmission, as described at Column 6, line 58 through Column 7, line 3.

Concurrently herewith, Applicant has submitted an Information Disclosure Statement directing the Examiner's attention to a newly discovered Japanese patent document, together with a translation of Claim 1 thereof. However, Applicant notes that the priority date of the present application is December 3, 1991, which predates the publication date (January 13, 1992) of the newly discovered publication. Accordingly, this Japanese patent document does not constitute a reference with respect to the present application, provided that the claim of priority is perfected. Thus, Applicant is obtaining and will submit promptly an English-language translation of the priority document for the present application.

As discussed with the Examiner by telephone, Applicant understands that it must surrender the original patent and submit a cumulative final reissue oath before processing of this application for issue can be completed. As indicated on the telephone, Applicant will provide both of these items as soon as possible. In the meantime, Applicant has submitted a Notice of Appeal concurrently herewith, so that there will be no question concerning the timeliness of the submission of these additional materials.

In light of the foregoing remarks, this application should be in condition for allowance, and early passage of this case to issue is respectfully requested. If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

It is respectfully requested that, if necessary to effect a timely response, this paper be considered as a Petition for an Extension of Time sufficient to effect a timely response and shortages in other fees, be charged, or any overpayment in fees be credited, to the Deposit Account of Evenson, McKeown, Edwards & Lenahan, P.L.L.C., Account No. 05-1323 (Docket #381TO/41092RE).

Respectfully submitted,

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